NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

535 759n 04/06/2009 K.F. ROSS P.C.

5683 RIVERDALE AVENUE SUITE 203 BOX 900 BRONX, NY 10471-0900

EXAMINER SUTTON, DARRYL C

PAPER NUMBER

ARTHNIT 1612 DATE MAILED: 04/06/2009

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/516,521 05/02/2005 Jurgen Dolderer 23136 4497

TITLE OF INVENTION: DIAGNOSTIC AGENT, METHOD FOR DETECTING A CARCINOMA, AND MEANS FOR THE TREATMENT THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	07/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
K.F. ROSS P.C 5683 RIVERDA SUITE 203 BOX	C. ALE AVENUE X 900	1/2009			Ces	tificate	of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the d	mission	
BRONX, NY 10	1471-0900								(Depositor's name)
									(Signature)
				ᆫ					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONF	IRMATION NO.
10/516,521 TITLE OF INVENTION	05/02/2005 i: DIAGNOSTIC AGEN	T, METHOD FOR DETI	Jurgen Dolderer ECTING A CARCINO	MA,	AND MEANS FO	OR THI	23136 E TREATMENT THE	REOF	4497
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	YES	\$755	\$300		\$0		\$1055		07/06/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS	\neg					
SUTTON, I	DARRYL C	1612	514-318000	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	condence address (or Cha B/122) attached. lication (or "Fee Address 302 or more recent) attach LND RESIDENCE DAT. less an assignee is ident th in 37 CFR 3.11. Comp	inge of Correspondence "Indication form and Use of a Customer		nativ ingle or a attor I be p r typ re pa an a	ely, elirm (having as a gent) and the namency or agents. If printed. e) tent. If an assignassignment.	membes of u no nan	er a 2p to p to se is 3		has been filed for
		categories (will not be p							
Advance Order -	No small entity discount p	permitted)	b. Payment of Fee(s): (ed. t card reby	I. Form PTO-2038 authorized to cha	is atta	ched. required fee(s), any de	ficiency.	
	is SMALL ENTITY state	as. See 37 CFR 1.27.					FITY status. Sec 37 CI		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other the k Office.	an th	ne applicant; a reg	stered	attorney or agent; or th	e assign	ee or other party in
Authorized Signature					Date				
Typed or printed name			Registration No.						
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DC 313-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vari rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the is the Chief Information O COMPLETED FORM	or re s esti ndivi ffice S TC	etain a benefit by i imated to take 12 idual case. Any co r, U.S. Patent and THIS ADDRES:	he pub minute mmen Trader S. SEN	tic which is to file (and to complete, including s on the amount of tin nark Office, U.S. Depo D TO: Commissioner	by the g g gather ne you r urtment of or Pater	USPTO to process) ing, preparing, and equire to complete of Commerce, P.O. its, P.O. Box 1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

OMB 0651-0033



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

PO Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/516,521	05/02/2005	Jurgen Dolderer	23136	4497		
535 75	590 04/06/2009		EXAMINER			
K.F. ROSS P.C.			SUTTON, DARRYL C			
5683 RIVERDALI		ART UNIT	PAPER NUMBER			
SUITE 203 BOX 900 BRONX, NY 10471-0900			1612 DATE MAILED: 04/06/2009			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 330 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 330 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/516.521 DOLDERER, JURGEN Notice of Allowability Examiner Art Unit DARRYL C. SUTTON 1612 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the Amendment filed November 12, 2008, 2. The allowed claim(s) is/are 14-18. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Examiner, Art Unit 1612

/Darryl C Sutton/

Other <u>Drawings</u>, 11/30/2004, <u>Approved</u>.

Supervisory Patent Examiner, Art Unit 1612

/Frederick Krass/

Application/Control Number: 10/516,521 Page 2

Art Unit: 1612

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jonathan Myers on 03/19/2009.

The Application has been amended as follows:

- a. In claim 14,
 - lines 3 and 4, delete "said disease" and insert --colorectal carcinoma--.
 - ii. line 8, insert --potassium-- between the words [HERG] and [channel].
- b. In claim 16,
 - line 8, delete "cloned DNA" and insert --- cDNA ---
 - ii. line 9, delete the comma appearing after "cDNA", and before "a".
- c. In claim 18,
 - line 3. delete "the disease" and insert –colorectal carcinoma--.

Application/Control Number: 10/516,521 Page 3

Art Unit: 1612

ii. line 5, delete "the disease" and insert -colorectal carcinoma--.

iii. line 10, insert "potassium" between the words [HERG] and

[channel].

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Even if it was obvious (it is not) to combine the references to treat an adenocarcinoma through modulation of potassium in the cells, Applicant has successfully shown the unexpected and surprising result that HERG potassium channel is differentially expressed in colorectal carcinoma and not in patients who do not have colorectal cancer. Therefore, the method of diagnosing colorectal carcinoma based on detection of the HERG potassium channel is clearly distinguishable from, and unexpected over, the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1612

Correspondence

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Darryl Sutton whose telephone number is (571)270-3286. The Examiner can normally be reached on Monday-Thursday 8:30-6:00 PM EST.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Frederick Krass can be reached on (571)272-0580. The fax number for the organization where this application or proceeding is assigned is (571)273-8300.

/Darryl C Sutton/

Examiner, Art Unit 1612

Application/Control Number: 10/516,521 Page 5

Art Unit: 1612

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612